| | (11) | | B1 unsimplified equiva | lent single vector |
|---|--|------------------|---|----------------------|
| | (19) | | $\operatorname{eg}\begin{pmatrix} 3 \times 2 + 5 \\ 3 \times 7 - 2 \end{pmatrix}$ | |
| | | B2 | or answer $\binom{11}{m}$ or ans | ower $\binom{n}{19}$ |
| | | | or $\binom{6}{21}$ seen | |
| | Additional Guidance | | | |
| | Condone fraction line for B2 or B1 | | | |
| | $\operatorname{eg}\left(\frac{11}{19}\right)$ | | | B2 |
| 1 | Answer $\binom{11}{m}$ must have m as a numerical value Answer $\binom{n}{19}$ must have n as a numerical value Must see the vector brackets to award any marks in the working | | | |
| | | | | |
| | | | | |
| | eg $\frac{11}{19}$ or $\frac{11}{19}$ or $\frac{6+5}{21-2}$ or $\frac{6}{21}$ | 6+5 6 21-2 21 | | B0 |
| | Unsimplified version may be awarded in the working but must be seen as a single vector | | | |
| | $\operatorname{eg} \begin{pmatrix} 6+5\\21-2 \end{pmatrix}$ | | | B1 |
| | $\begin{pmatrix} 6 \\ 21 \end{pmatrix}$ may be awarded in the working | if seen as | s a vector | B1 |

| Q | Answer | Mark | Comments | |
|---|-------------------------------------|------|----------|----|
| | (5 ₂₃) | B1 | | |
| 2 | Additional Guidance | | | |
| | Condone $\left(\frac{5}{23}\right)$ | | | B1 |

| Q | Answer | Mark | Commen | its | |
|------|---|------|--|-----|--|
| | (4 ₋₁) | | B1 (4) or () | | |
| | | B2 | or (4, -1) | | |
| 3(a) | | | SC1 $\begin{pmatrix} -4 \\ 1 \end{pmatrix}$ or $\begin{pmatrix} -1 \\ 4 \end{pmatrix}$ | | |
| | Additional Guidance | | | | |
| | Ignore fraction lines | | | | |
| Q | Answer | Mark | Comments | | |
| | (12 ₈) | B1 | | | |
| 2/5) | Additional Guidance | | | | |
| 3(b) | $4 \binom{3}{2}$ or $\binom{12}{8}$ in working with answer $\binom{3}{2}$ | | В0 | | |
| | Ignore fraction lines | | | | |
| | | | | | |
| Q | Answer | Mark | Comments | | |
| 3(c) | $\begin{pmatrix} 0 \\ -2 \end{pmatrix}$ | B1 | | | |

| Q | Answer | Mark | Comments | | |
|---|--|------|----------|--|--|
| | (5) (8) | B1 | | | |
| 4 | Additional Guidance | | | | |
| | Condone 'fraction line' between the two numbers for B1 but must have the numbers in a column | | | | |
| | | | | | |